

# PENTENS T-200

## Heating Resistant Waterproofing Coating

### Product Data Sheet

#### Description

PENTENS T-200 is based on a newly developed Acrylic polymers which dramatically reduces solar heat absorption in either air-conditioned or non-air conditioned buildings. PENTENS T-200 is an environmentally friendly and low VOC material. It takes the majority of the heat load off a building's exterior walls and reduces temperature to approximately that of outside shade.

#### Uses

PENTENS T-200, which is a one-part elastomeric cross linking latex copolymer emulsion designed as exposed waterproofing coating on:

- Exposed RC gutters/ RC flat roof
- Floor slabs
- Deck
- External wall
- Metal roof
- Car porch roof

#### Advantages

- Low VOC.
- Water-based, environmentally friendly.
- Air and UV protection.
- Chemical resistance and waterproof.
- User friendly, suitable for use on any surfaces.
- Adheres well on aged, galvanized and metal roofs, wood, asphalt or aluminium coatings, polystyrene foam insulation, polyester plastic panels, precast flat concrete and barrel cement tiles and many roofing materials.
- Has a high rate of water vapor transmission which permits moisture in the substrate to escape without causing blistering, peeling, or flaking.
- Prevention from the ravages of acid rain, freeze-thaw, cycles, sunlight, bacteria and fungus.
- Non-toxic.

#### Technical & Physical Data

Color	Grey, White, Green
Resin	Acrylic
Density	1.30 kg/litre
Solid Content	>60% by weight
Elongation (ASTM D412)	197.4%
Tensile Strength (ASTM D412)	3.5 N/mm <sup>2</sup>
Reflectivity (Light Color)	>75%
QUV Accelerated Weathering	No cracking
Application Temperature	5°C to 50°C
Service Temperature	5°C to 100°C
Shelf Life	At least 1 year when unopened and damaged
Storage Condition	Store in a dry, cool place
Packaging	20kg /pail 200kg /drum

#### Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Never apply more than 1 kg/m<sup>2</sup> of PENTENS T-200 in one single layer.
3. Apply to only clean, sound substrates. Surfaces should be well-dampened but free from water and leakages.
4. Thoroughly agitate contents before use.

**Green Label Test Data**

Heavy Metals :

(EPA 3025 / EPA 6010B : ICP)

a. Cadmium (Cd)	Not Detected
b. Lead (Pd)	Not Detected
c. Total Chromium (Cr)	Not Detected
d. Mercury (Hg)	Not Detected

Volatile Organic Compounds (ISO 11890-2) (g/L)	10.19
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Total Halogenated Organic Solvent (ISO 11890-2) (%)	Not Detected
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Total Aromatic Organic Solvent (ISO 11890-2) (%)	Not Detected
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Epichlorohydrin (ISO 11890-2) (%)	Not Detected
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N-Methyl Pyrrolidinone (ISO 11890-2) (%)	Not Detected
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Formaldehyde (High Performance Liquid Chromatography) (%)	Not Detected
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Alkyl Phenol Ethoxylate (LCMS-MS) (%)	Not Detected
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Flash Point (ASTM D3828-07a) (oC)	> 61
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**Instruction For Use**

**Surface Preparation**

Surface must be sound, dry and clean (free from dirt, gravels, pollution, mildew and all foreign materials). Do not apply if rain is imminent. Repair flashings and damaged areas. Cracks and old bitumen joints should be repaired first. Existing surfaces must be thoroughly cleaned before applying PENTENS T-200.

Sweep and vacuum or power wash surface to remove dirt and dust. Cut out roof blisters and repair with acrylic embedded in polyester fabric or polymer concrete. Remove mildew with sodium hypochlorite or other algacide and rinse with clean water. Fill any other gaps with silicon impregnated latex caulk. Any loose shingles should be gently lifted and glued with roofing cement.

**Application**

Dilute 1 portion of PENTENS T-007 permeable primer or 1 portion of PENTENS T-200 with 3 portions of clean water and then plaster directly on the surface to be waterproofed in order to improve bonding.

PENTENS T-200 is best applied in 2 coats. Apply the first coat of PENTENS T-200 on the application surface. Leave to cure for approximately 8 hours before applying second coat. PENTENS T-200 can be installed with conventional airless spray, brush or roller.

**Over Coating**

After the primer PENTENS T-200 can be applied directly for areas exposed to hot drying winds. For indoor areas, it is recommended that PENTENS T-200 is applied approximately 30 minutes after the primer. For more details, please refer to PENTENS Technical Department.

**Consumption**

**Standard coating system:**

PENTENS T-200 applied in minimum of two coats (exclude primer)

1 x coat of PENTENS T-007 at 0.2kg/m<sup>2</sup>

2 x coats of PENTENS T-200 at 0.75kg/m<sup>2</sup>/coat

**Exposed waterproofing reinforced system –**

Reinforced with layer of PENTENS ACW-015 fiberglass or PENTENS ACW-014 chopped strand fiberglass mat.

1 x coat of PENTENS T-007 at 0.2kg/m<sup>2</sup>

1 x coat of PENTENS T-305TH at 1.0kg/m<sup>2</sup>

PENTENS ACW-015 or ACW-014

1 x coat of PENTENS T-305TH at 1.0kg/m<sup>2</sup>

2 x coats of PENTENS T-200 at 0.75kg/m<sup>2</sup>/coat

**Curing**

Allow coating to cure thoroughly for approximately 4 – 8 hours depending on temperature, humidity and wind conditions before applying subsequent coat.

**Cleaning**

Tools and equipment can be easily cleaned with water immediately after use. Hardened material can only be mechanically removed.

**Safety**

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, rinse immediately and thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin cleanser followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.



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